

**CLAIMS**

1. Means for attempting to construct a path through a packet network from a source host address to a destination host address, comprising means for signalling to a device for controlling admission to a section of the desired path, and for returning information on a range of host addresses controlled by that admission control device.
  
2. Path construction means as claimed in Claim 1, including a second device for controlling admission to another section of the path, and in which a reservation state in the admission control devices is, in use, maintained when setting up a reservation to another host address controlled by the first-mentioned admission control device.
  
3. Path construction means as claimed in Claim 1 or Claim 2, in which the signalling means is arranged to return the address of the first-mentioned admission control device.
  
4. Path construction means as claimed in Claim 3, in which the signalling means is arranged to signal directly to the first-mentioned admission control device when setting up a reservation to another host address controlled by the first-mentioned admission control device.
  
5. Path construction means as claimed in any one of Claims 1 to 4, in which the admission control device has a release state and a reserved state arranged to achieve a desired quality of service.
  
6. Path construction means as claimed in any one of Claims 1 to 5, wherein the signalling means is arranged to return the information in conjunction with information

passed in the attempt to set up the reservation between the source host and destination host.

7. Path construction means as claimed in any one of Claims 1 to 6, including means to examine address ranges returned from multiple reservations, and to detect overlapping ranges from concurrent sessions.

8. Path construction means as claimed in any one of Claims 1 to 7, wherein a tunnel reservation is constructed.

9. Path construction means as claimed in Claim 8, in which the first-mentioned admission control device is arranged to provide address information local to the end of the tunnel.

10. Path construction means as claimed in Claim 8 or Claim 9, including means to move another reservation in the network into the tunnel.

11. Path construction means as claimed in any one of Claims 1 to 10, in which the rate of the section of the desired path is less than one half of the rate of the preceding section of the path.

12. Path construction means as claimed in Claim 11, in which the rate of the section of the desired path is less than one tenth of the rate of the preceding section of the path.

13. A method for attempting to construct a path through a packet network from a source host address to a destination host address, comprising signalling to a device for controlling admission to a section of the desired path, and returning information on a range of host addresses controlled by that admission control device.
14. A method as claimed in Claim 13, including a second device for controlling admission to another section of the path, in which a reservation state in the admission control devices is maintained when setting up a reservation to another host address controlled by the first-mentioned admission control device.
15. A method as claimed in Claim 13 or Claim 14, in which the signalling means returns the address of the first-mentioned admission control device.
16. A method as claimed in Claim 15, in which the signalling means signals directly to the first-mentioned admission control device when setting up a reservation to another host address controlled by the first-mentioned admission control device.
17. A method as claimed in any one of Claims 13 to 16, in which the admission control device has a release state and a reserved state arranged to achieve a desired quality of service.
18. A method as claimed in any one of Claims 13 to 17, wherein the signalling means returns the information in conjunction with information passed in the attempt to set up the reservation between the source host and destination host.

19. A method as claimed in any one of Claims 13 to 18, including examining address ranges returned from multiple reservations, and detecting overlapping ranges from concurrent sessions.
20. A method as claimed in any one of Claims 13 to 19, wherein a tunnel reservation is constructed.
21. A method as claimed in Claim 20, in which the first-mentioned admission control device provides address information local to the end of the tunnel.
22. A method as claimed in Claim 20 or Claim 21, including moving another reservation in the network into the tunnel.
23. A method as claimed in any one of Claims 13 to 22, in which the rate of the section of the desired path is less than one half of the rate of the preceding section of the path.
24. A method as claimed in Claim 23, in which the rate of the section of the desired path is less than one tenth of the rate of the preceding section of the path.